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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,408	07/09/2001	Charles L. Hett	H0001382-US	6452

7590 12/28/2005

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EXAMINER

SEFER, AHMED N

ART UNIT	PAPER NUMBER
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2826

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/901,408

Applicant(s)

HETT ET AL

Examiner

A. Sefer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-39 is/are pending in the application.  
4a) Of the above claim(s) 15-29 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 30-39 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed October 11, 2005 has been entered; no new claims have been introduced.

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “lighting elements”, “a housing comprising a structural support system” and “a transparent cover” must be shown **in the elected embodiment shown in fig. 3** or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 30-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The application as originally filed does not specifically support the claim limitation ““a first channel processor coupled to **the first and second data sources** ... and a second channel processor coupled to **the first and second data sources**.” The specification discloses that the first and second channel processors being coupled to different data sources (fig. 2) -- the first channel processor 202 is coupled to data source 210 and the second channel processor 204 is coupled to data source 212.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 30, 31, 34 and 35-39, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishida ("Nishida") USPN 5,767,818 in view of Hayes et al. ("Hayes") USPN 6,112,140.

Nishida discloses in figs. 6-10 a liquid crystal display system comprising four autonomous liquid crystal display units arranged adjacent to each other, each of the liquid crystal display units including an array of lighting elements 83; a housing 200 comprising a structural support system 202 and transparent cover 82, said housing substantially surrounding said units; and a channelization system in communication with said units, said channelization system comprising a first channel processor 51-53 coupled to a data sources and to first and second liquid crystal display units; and a second channel processor 51-53 coupled to a data source and to third and fourth liquid crystal display units, wherein the first and second channel processors control the data from the data sources displaying data from the same data source (as in claim 34) to present on the respectfully coupled displays (see figs. 3, 14 and 18), but lacks anticipation of a first channel processor coupled to **first and second data sources** and a second channel processor coupled to **the first and second data sources**.

Hayes discloses in fig. 2 a liquid crystal display system comprising liquid crystal display units including an array of lighting elements 142-144 a first channel processor 102 coupled to **first and second data sources** 112/122 and a second channel processor 104 coupled to **the first and second data sources** 114/122.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Nishida's device by incorporating a first channel processor coupled to **first and second data sources** and a second channel processor coupled to **the first and second data sources** since that would automatically respond to detected failures in display units as taught by Hayes.

Regarding claim 31, Nishida discloses a structural support system comprising a frame 201 secured to a cavity and enclosing a transparent cover and said units.

Regarding claims 35-39, Nishida discloses said arranged display units comprising top display units and bottom display units including the first and the second display units (as in claim 36); wherein the bottom display units include the first and the second display units (as in claim 37); wherein the top display units include the first display unit and the bottom display unit includes the second display unit (as in claim 38); and wherein the top display units include the second display unit and the bottom display unit includes the first display unit (as in claim 39).

7. Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishida in view of Hayes as applied to claims 30 and 31 above, and further in view of Seraphim ("Seraphim") USPN 5,889,568.

The combined references disclose the device structure as recited in the claim, but lack anticipation of a transparent cover.

Seraphim discloses (see figs. 6, 12 and 15 and col. 6, lines 23-31) a plurality of autonomous liquid crystal display units in a tiled arrangement, each of said units configured to display a data; a housing comprising a structural support 62 and transparent cover 50.

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Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate Seraphim's teachings since that would provide an environmental protection as taught by Seraphim.

Regarding claim 32, Seraphim discloses (see fig. 4, col. 5, lines 25-35 and col. 6, lines 23-31) a structural support system comprising a frame (not shown) secured to a cavity and enclosing a transparent cover and said units, wherein said structural support system comprises a carrier 75 having said units disposed therein.

As for claim 33, Seraphim discloses in figs. 8 and 9 a screen divider (unnumbered) between said cover and said units.

~~NATHAN Z. FLYNN~~  
~~SUPERVISORY PATENT EXAMINER~~  
~~TECHNOLOGY CENTER 2800~~

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (571) 272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANS  
December 26, 2005